

✓ 4. (Once Amended) An object recognition system, comprising:

a plurality of hand-held objects; and

a device including:

a microprocessor [for prompting selection of a particular hand-held object of said plurality of hand-held objects];

a visual display capable of providing an interactive environment for a child, the interactive environment presenting a child with a visual event requiring the child to cognitively react by selecting and manipulating one or more hand-held objects of said plurality of hand-held objects in response to said event; and

a circuit for identifying [a selected hand-held object] said selected and manipulated one or more hand-held objects of said plurality of hand-held objects, [and for] said visual display further providing [feedback] a response based on said selected and manipulated one or more hand-held objects.

✓ 5. (Once Amended) An object recognition system as recited in claim 4, further comprising a platform for receiving said [selected] one or more hand-held objects, and for communicating a signal to said [device] microprocessor representative of said [selected] one or more hand-held objects located on said platform.

✓ 6. (Once Amended) An object recognition system as recited in claim 4, said [feedback] response [indicating a correct selection of objects where said selected hand-held object is the same as said particular hand-held object] providing positive reinforcement to the child when said selection and manipulation of said one or more hand-held objects corresponds to a preferred response to said visual event.

✓ 7. (Once Amended) An object recognition system as recited in claim 4, said [feedback] response suggesting [indicating] an incorrect selection [of objects where said selected hand-held object is not the same as said particular hand-held object] when said selection and manipulation of said one or more hand-held objects does not correspond to a preferred response to said visual event..

C! ✓ 8. (Once Amended) An object recognition system as recited in claim 4, wherein each object of said plurality of hand-held objects includes [an indicial mark on a surface of said object] a visual aspect, and wherein [said device prompts selection of] selection and manipulation of an object including a particular [indicial mark] visual aspect represents a preferred response to said event.

✓ 9. (Once Amended) An object recognition system as recited in claim 8 wherein said [indicial mark] visual aspect comprises an alphanumeric character.

✓ 10. (Once Amended) An object recognition system as recited in claim 8 wherein said [indicial mark] visual aspect comprises a braille character.

✓ 11. An object recognition system as recited in claim 5, wherein said plurality of hand-held objects comprise a plurality of blocks, each block of said plurality of blocks including at least one alphanumeric character on a surface thereof, said device prompting selection of blocks including particular characters to be positioned on said platform in a particular order.

✓ 12. (Once Amended) An object recognition system, comprising:

a plurality of hand-held objects capable of manual selection and manipulation;

a platform for [a] supporting a hand-held object manually selected from said plurality of hand-held objects [for placement of said platform; and];

a device including a microprocessor and a visual display operatively connected to said platform, [for providing feedback based on said hand-held object manually selected for placement onto said platform.] said visual display providing an interactive environment for a user of the system, the interactive environment presenting a visual scenario to the user requiring the user to exercise judgement in selecting and manipulating an object of the plurality of objects in response to said scenario; and
a detecting element proximate to said platform capable of detecting said selection and manipulation of said object.

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13. (Once Amended) An object recognition system as recited in claim 12, wherein said device comprises a personal computer [each object of said plurality of hand-held objects includes an indicial mark on a surface of said object, and wherein said device prompts selection of an object including a particular indicial mark].

14. (Once Amended) An object recognition system as recited in claim 13, wherein said hand-held object has a visual aspect and a characteristic representative of said visual aspect, said detecting element comprising a wire grid below said platform, said wire grid capable of detecting said characteristic. [wherein said indicial mark comprises an alphanumeric character.]

15. (Once Amended) An object recognition system as recited in claim [13] 14, wherein said [indicial mark] visual aspect comprises an [braille] alphanumeric character.

16. (Once Amended) An object recognition system for interacting with a computer, the system comprising:

a plurality of hand-held objects, each object of said plurality of objects including [at least one indicial mark on a side of said object] a visual aspect;

[at least one emitter within each said object, said at least one emitter capable of actively emitting a first signal representative of said at least one indicial mark;]

a platform for supporting said plurality of hand-held objects; and

a visual display capable of presenting an interactive environment to a user of the system, the interactive environment presenting an event to the user requiring the user to exercise judgement in selecting and placing an object of the plurality of hand-held objects at a position on said platform in response to said event.

[for receiving a group of two or more objects manually selected from said plurality of objects, said platform capable of conveying at least a second signal representative of said indicial marks on said group of objects and a relative position of objects of said group on said platform; and

means for communicating said at least second signals to the computer.]

17. (Once Amended) An object recognition system for interacting with a computer as recited in claim 16, said each hand-held object exhibiting a characteristic representative of said visual aspect of said each hand-held object. [said group of objects being selected in response to prompting from the computer.]

18. (Once Amended) An object recognition system for interacting with a computer as recited in claim 16, wherein [an indicial mark] a visual aspect of said [indicial marks] at least one visual aspect comprises an alphanumeric character.

19. (Once Amended) An object recognition system for interacting with a computer as recited in claim 16, wherein [an indicial mark] a visual aspect of said [indicial marks] at least one visual aspect comprises a braille character.

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20. (Once Amended) An object recognition system for interacting with a computer as recited in claim [16] 17, further comprising a sensor system underneath said platform, said sensor system capable of detecting said characteristic for said object selected and placed on said platform in response to said event. [wherein said plurality of hand-held objects comprise objects having six substantially planar surfaces.]

21. (Once Amended) An object recognition system for interacting with a computer as recited in claim [16] 20, said sensor system being operatively connected to the computer, the computer capable of identifying said visual aspect of said object from said characteristic detected by said sensor system. [wherein said plurality of hand-held objects comprise tiles.]

[22. An object recognition system for interacting with a computer, the system comprising:
a plurality of hand-held objects, each object of said plurality of objects including
at least one indicial mark on a side of said object;
at least one emitter within each said object, said at least one emitter capable of
actively emitting a first signal representative of said at least one indicial mark;

a platform for receiving at least one object manually selected from said plurality of objects in response to prompting from the computer, said platform capable of conveying at least a second signal representative of said indicial mark on said object; and means for communicating said at least second signals to the computer.]

[23. An object recognition system for interacting with a computer as recited in claim 22, wherein an indicial mark of said indicial mark comprises an alphanumeric character.]

[24. An object recognition system for interacting with a computer as recited in claim 22, wherein an indicial mark of said indicial mark comprises a braille character.]

C3 *Prints* 25. (Once Amended) An object recognition system for interacting with a computer as recited in claim [22] 18, wherein said plurality of hand-held objects comprise objects having six substantially planar surfaces.]

[26. An object recognition system for interacting with a computer as recited in claim 22, wherein said plurality of hand-held objects comprise tiles.]

C4 27. (Once Amended) A system, comprising:

a plurality of hand-held objects, an object of said plurality of hand-held objects including a distinguishing appearance [having at least one symbol thereon];

an identifying element corresponding to said distinguishing appearance;

[an emitter within said object for actively emitting a signal including encoded information uniquely representative of said at least one symbol;]

a surface for supporting said object; [and]

at least one detecting element positioned proximate to said surface, said at least one detecting element capable of detecting said identifying element of said object; and

a personal computer including:

an executable code loading device for loading executable code into said personal computer from an outside source;

an executable code storage device for storing code;

a processor for executing the executable code and processing information communicated by the sensing element; and

a display for presenting a graphical user interface. [, including means for receiving said signal from said emitter, said processor capable of identifying said symbol from said signal.]

28. (Once Amended) A system as in claim 27, wherein said processor is [further] capable of identifying a position of said object on said surface from a location of said identifying element detected by said at least one detecting element.

29. (Once Amended) A system as in claim 27, wherein said processor is capable of identifying said distinguishing appearance from said identifying element detected by said at least one detecting element [symbol is visually recognizable].

C4 30. (Once Amended) A system as in claim 27, wherein said personal computer presents an event on said display after said object is placed on said platform, said event being dependent on said distinguishing appearance of said object on said platform [symbol is recognizable by touch].

[31. An apparatus for entering data into a computer, the data being entered via the placement of one or more objects on the apparatus, each object of the one or more objects having at least one unique item of data associated therewith, comprising:

a substantially flat, planar surface for receiving the placement of the one or more objects;

one or more detectors capable of detecting the at least one unique item of data associated with the one or more objects placed on the surface;

a communication link capable of communicating the detected data from the apparatus to the computer, the computer capable of providing feedback relating to the data detected from the one or more objects placed on the surface.]

[32. An apparatus for entering data into a computer, the data being entered via the placement of one or more objects on the apparatus, each object of the one or more objects having at least one unique item of data associated therewith, comprising:

a surface for receiving the placement of the one or more objects;

one or more detectors beneath said surface capable of detecting the at least one unique item of data associated with the one or more objects placed on the surface;

a communication link capable of communicating the detected data from the apparatus to the computer, the computer capable of providing feedback relating to the data detected from the one or more objects placed on the surface.]

33. (New) A system as in claim 27, further comprising a communication line connecting said detecting element to an input/output connector of said personal computer.

34. (New) A system as in claim 33, wherein said communication line is connected to a keyboard connector of said personal computer.

35. (New) A system as in claim 33, wherein said communication line is connected to a serial port of said personal computer.

36. (New) A system as in claim 27, further comprising a wireless communication link between said detecting element and said personal computer.

37. (New) A system as in claim 27, further comprising a data transmission line connecting said personal computer to a remote location.

38. (New) A system as in claim 37, wherein the executable code is loaded from said remote location over said data transmission line.

39. (New) A system comprising:

a plurality of hand-held objects;

a platform for supporting said plurality of hand-held objects;

a personal computer including:

an executable code loading device for loading executable code into said personal computer from an outside source,

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an executable code storage device for storing code,
a processor for executing the executable code and generating a visual display for triggering selection and manipulation of said plurality of hand-held objects by providing an interactive environment for a child, the interactive environment presenting a child with a visual scenario requiring the child to cognitively react by selecting and manipulating one or more hand-held objects of said plurality of hand-held objects in response to said visual scenario, and
a graphical interface for displaying said visual display; and
a sensing element proximate to said platform, said sensing element capable of identifying the selection and manipulation of said one or more hand-held objects.

40. (New) A system as in claim 39, further comprising a communication line connecting said sensing element to an input/output connector of said personal computer.

41. (New) A system as in claim 40, wherein said communication line is connected to a keyboard connector of said personal computer.

42. (New) A system as in claim 40, wherein said communication line is connected to a serial port of said personal computer.

43. (New) A system as in claim 39, further comprising a wireless communication link between said sensing element and said personal computer.

44. (New) A system as in claim 39, further comprising a data transmission line connecting said personal computer to a remote location.

45. (New) A system as in claim 44, wherein the executable code is loaded from said remote location over said data transmission line.

46. (New) An interactive computer system, comprising:

C5 a plurality of hand-held objects, said plurality of hand-held objects each having at least one distinguishing visual aspect and a component exhibiting an electromagnetic characteristic;

a personal computer, including:

a loading device for loading executable code into said personal computer from an outside source, said executable code capable of facilitating the interaction of a user with the computer using hand-held objects,

a storage device for storing the executable code,

a first processor for processing the executable code and other information,

and

a display for presenting a graphical image to a user to encourage the selection and manipulation of a hand-held object of said plurality of hand-held objects; and

a substantially horizontal surface including at least a section capable of supporting said hand-held object.

47. (New) An interactive computer system as recited in claim 46, further comprising at least one detecting element provided under and generally parallel to said section of said surface, a portion of said at least one detecting element capable of detecting said characteristic from said hand-held object.

48. (New) An interactive computer system as recited in claim 47, further comprising a second processor, at least one of said first and second processors being capable of identifying at least one of: (a) the at least one distinguishing visual aspect of said hand-held object based on said characteristic of said hand-held object detected by said at least one detecting element and (b) the position of said hand-held object on said surface based on a position of said portion of said at least one detecting element.

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49. (New) A computer system comprising:

a plurality of hand-held objects, an object of said plurality of hand-held objects having a unique visual aspect;

a substantially horizontal surface including at least a section capable of supporting said plurality of hand-held objects, said section having no predefined positions for supporting said plurality of hand-held objects;

a detecting element proximate to at least said section of said surface;

a first processor linked to said sensing element;

a personal computer, including:

a loading device for loading executable code into said personal computer from an outside source,

a storage device for storing the executable code,

a second processor for processing at least the executable code, and
an output device for presenting a user interface;

a component within said hand-held object capable of affecting an electrical change in a portion of said detecting element;

at least one of said first and second processors being capable of identifying at least one of: (a) said visual aspect of said hand-held object based on said electrical change, and (b) a position of said hand-held object on said surface based on a position of said portion of said detecting element.

50. (New) A system for interacting with a computer as recited in claim 49, wherein said detecting element comprises a wire grid.

51. (New) A system for interacting with a computer as recited in claim 49, wherein said detecting element comprises a plurality of electrically conductive wires.

52. (New) A computer system comprising:

a plurality of hand-held objects, an object of said plurality of hand-held objects having a unique visual aspect and a component exhibiting a characteristic representing said visual aspect;

a substantially horizontal surface including at least a section capable of supporting said plurality of hand-held objects, said section having no predefined positions for supporting said plurality of hand-held objects;

a detecting element provided proximate to at least said section of said surface, a portion of said detecting element being capable of detecting said characteristic of said

component;

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a processor linked to said detecting element, said processor being capable of identifying at least one of: (a) said visual aspect of said hand-held object based on said detected characteristic, and (b) a position of said hand-held object on said surface based on a position of said portion of said detecting element.
